**Report Part III**

**Algorithm**

The algorithm used for image segmentation is K Means

Input

The code takes the 5 images placed in input-images directory as input.

Parameters

The default value for K is set to 4 in the source code, this can be changed if required.

Output

The clustered images are places in the clusteredImages directory

Packages

* Sklearn for the KMeans algorithm
* MatPlotLib for plotting images
* OpenCV: cv2 for the image processing tasks
* Numpy for array manipulation

Resources

* http://docs.opencv.org/3.1.0/d1/d5c/tutorial\_py\_kmeans\_opencv.html#gsc.tab=0
* http://www.pyimagesearch.com/2014/07/07/color-quantization-opencv-using-k-means-clustering/